COLLIMATION SYSTEM FOR DUAL SLICE EBT SCANNER

Abstract of Disclosure

An electron beam tomography (EBT) scanning system comprising an electron source generating an electron beam, a target ring that receives the electron beam and emits an x-ray fan beam upon impingement of the electron beam on the target ring, a pair of detector arrays arranged opposite the target ring, and a collimator arranged concentrically between the target ring and the pair of detector arrays. The collimator has interior and exterior walls concentrically arranged with one another and surrounding a patient examination area. The interior and exterior walls have a first set of apertures aligned to collimate the x-ray fan beam into a first collimated beam having a first width and a second collimated beam having a second width. Each collimated beam may form a single or double tomographic slice. The collimated beams are detected by the pair of detector arrays.

Figures